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ABSTRACT

The New York City Russian Bilingual Program is described in this report. As implemented in 1980-81, the program provided instruction in English as a second language, native language arts, reading, and bilingual mathematics, science, social studies, and other subject areas to approximately 700 Russian-dominant students of limited English proficiency in eleven public and non-public high schools. The report describes the schools where the program was implemented; characteristics of program participants; the student placement process; instructional offerings; non-instructional program components such as curriculum development, program organization, supplementary services, and parent involvement; program implementation; and program evaluation. Statistical tables provide evaluation results. Among the findings are that: (1) limited gains were made in mastery of English syntax objectives; (2) in general, statistically significant achievement gains were made in native language, mathematics, and Russian culture courses; (3) program participants' average attendance rates were better than school-wide attendance rates; and (4) several graduates of the program had been accepted to a number of colleges. It is suggested that the multisite format is extremely effective for programs of this kind, and that program services should be extended to reach more students. (Author/MJL)

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FINAL EVALUATION REPORT

E.S.E.A. TITLE VII

Grant Number: G007905030

Project Number: 5001-56-17623

NEW YORK CITY

RUSSIAN BILINGUAL PROGRAM

1980-1981

Director: Florence Seiman

Prepared By The

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NEW YORK CITY PUBLIC SCHOOLS
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TABLE OF CONTENTS

		PAGE
I.	General Overview	1
	Physical Environment	4
	Demographic Context	6
II.	Student Characteristics	8
III.	Program Description	9
IV.	Instructional Component	13
	Student Placement and Programming	13
	Classification and Mainstreaming	14
	Instructional Offerings	16
V.	Non-Instructional Component	22
	Curriculum Development	22
	Supportive Services	23
	Staff Development	25
	Staffing Pattern	28
	Parental and Community Involvement	28
	Affective Domain	32
VI.	Findings	33
	Assessment Procedures, Instruments, and Findings	33
VII.	Conclusions and Recommendations	71

LIST OF TABLES

		PAGE
Table 1.	Student participation in the bilingual program.	3
Table 2.	Structure of New York City Russian Bilingual Program.	12
Table 3.	Overview of bilingual services at New York City Russian Bilingual Program sites.	17
Table 4.	Instruction in English as a second language.	20
Table 5.	Instruction in native language arts.	20
Table 6.	Bilingual instruction in content areas.	21
Table 7.	Staff development: central activities.	26
Table 8.	Staff development: university courses attended by staff.	27
Table 9.	Title VII staff characteristics: professional and paraprofessional staffs.	29
Table 10.	Results of the Criterion Referenced English Syntax Test (South Shore High School).	37
Table 11.	Performance of students tested on the Criterion Referenced English Syntax Test (South Shore High School).	38
Table 12.	Results of the Criterion Referenced English Syntax Test (Abraham Lincoln High School).	39
Table 13.	Performance of students tested on the Criterion Referenced English Syntax Test (Abraham Lincoln High School).	40
Table 14.	Results of the Criterion Referenced English Syntax Test (Forest Hills High School).	41
Table 15.	Performance of students tested on the Criterion Referenced English Syntax Test (Forest Hills High School).	42
Table 16.	Results of the Criterion Referenced English Syntax Test (Non-public high schools).	43

PAGE

Table 17. Performance of students tested on the Criterion Referenced English Syntax Test (Non-public high schools). 44

Table 18. Results of the Criterion Referenced English Syntax Test by non-public high school. 45

Table 19. Results of the Criterion Referenced English Syntax Test (students pre- and post-tested at different levels). 46

Table 20. Native language achievement. 47

Table 21. Mathematics achievement. 49

Table 22. Russian culture and heritage achievement. 51

Table 23. Mathematics course offerings. 53

Table 24. Number of students attending courses and percent passing teacher-made examinations in mathematics. 54

Table 25. Science course offerings. 55

Table 26. Number of students attending courses and percent passing teacher-made examinations in science. 56

Table 27. Social studies course offerings. 57

Table 28. Number of students attending courses and percent passing teacher-made examinations in social studies. 58

Table 29. Native language course offerings. 59

Table 30. Number of students attending courses and percent passing teacher-made examinations in native language arts. 60

Table 31. Miscellaneous course offerings. 61

Table 32. Number of students attending courses and percent passing teacher-made examinations in cultural heritage. 62

Table 33. Number of students attending courses and percent passing teacher-made examinations in attitude. 63

Table 34. Number of students attending courses and percent passing teacher-made examinations in business education. 64

PAGE

Table 35. Number of students attending courses and percent passing teacher-made examinations in vocational education. 65

Table 36. Number of students attending courses and percent passing teacher-made examinations in courses combining fine arts and language arts. 66

Table 37. Significance of the difference between attendance percentages of program students at South Shore High School and the attendance percentage of the school. 67

Table 38. Significance of the difference between attendance percentages of program students at Forest Hills High School and the attendance percentage of the school. 68

Table 39. Significance of the difference between attendance percentages of program students at Abraham Lincoln High School and the attendance percentage of the school. 69

Table 40. Attendance rates for non-public schools. 70

NEW YORK CITY RUSSIAN BILINGUAL PROGRAM

Central Office Location:	South Shore High School 6565 Flatlands Avenue Brooklyn, New York 11236
Alternate Central Location:	P.S. 188 442 Houston Street New York, New York 10002
Year of Operation:	1980-1981, second year of a three-year funding cycle
Target Language:	Russian
Number of Sites:	3 public high schools 8 private high schools
Number of Participants:	Approximately 700 students of limited English proficiency
Project Director:	Florence Seiman

I. GENERAL OVERVIEW

The New York City Russian Bilingual Program is now in the second year of a three-year funding period. Its general characteristics and unique qualities, the sociological profile of its participants, its general description, its philosophy and objectives, and the organization and structure of its components, as well as the distribution of its human and physical assets, have remained generally the same as in 1979-1980, the first year of its operation.[1] The administrative pattern and procedures established then have continued to serve the program. The same can be said of the extent, the nature, and the quality of services it provides and activities it conducts.

[1] Cf. Charts I and II, table on p.11, lists of schools and offices, pp. 13-15, Table I, Charts III and IV of the 1979-1980 Final Evaluation Report.

The criteria for student entry, programming, placement, and mainstreaming have remained essentially the same (subject, of course, to some fine-tuning which, on the whole, brought about no significant changes in policies or procedures). Instructional activities have also retained their earlier structure and methodology. In general, as the program is developing, the main changes have been of a developmental kind: its activities have broadened in scope, increased in depth, and grown in sophistication.

The same can be said of the non-instructional area where needs for the program's services were more sharply discerned and evaluated, instructional and testing materials developed, guidance counseling and advisement provided, community support obtained, and its benefits maximized. The program continued to strengthen the school-family-community ties, integrating these components into a single and coordinated student-centered whole. Similarly, the staff has maintained its standard of professionalism by continuing its aggressive pursuit of knowledge through formal structured programs, semi-structured exchange-of-experience workshops, and unstructured, friendly, collegial give-and-take. Other program components, involving both the students and their parents, as well as community organizations, have been successfully continuing and growing.

In 1980-81, the program served approximately seven hundred Russian-dominant students who had limited English proficiency. All of them were located in Brooklyn and Queens. Approximately sixty percent of these attended the three public schools served by the program in these boroughs and the remaining forty percent studied at eight non-public high schools. Table 1 presents a summary of student participation in the program at all eleven sites.

Table 1. Student participation in the bilingual program.

SITE	TOTAL ENROLLMENT	NUMBER OF PROGRAM STUDENTS
Public High Schools		
Abraham Lincoln, Brooklyn, N.Y.	2,800	150
Forest Hills, Forest Hills, N.Y.	2,350	175
South Shore, Brooklyn, N.Y.	5,200	100
Private High Schools		
Solomon Schechter, Brooklyn, N.Y.	180	40
United Lubavitcher, Brooklyn, N.Y.	276	42
Yeshiva of Flatbush, Brooklyn, N.Y.	590	10
Yeshivot Haramah, Brooklyn, N.Y.	107	13
Beth Rivkah, Brooklyn, N.Y.	228	29
Ezra Academy of Queens, Flushing, N.Y.	79	35
Forest Hills Mesifta, Forest Hills, N.Y.	134	9
Be'er Hagolah Institute, Brooklyn, N.Y.	130	85

The program staff comprises twenty-four positions filled by qualified personnel: one program director, one teacher assigned as grade advisor, one teacher assigned as community liaison, one curriculum specialist, three resource teachers, three E.S.L. teachers, nine educational assistants, three family assistants, one school secretary, and one office aide. Of these, six are central staff, while the others are located at the sites. These six include the project director, the curriculum specialist, the grade advisor, the community liaison, the secretary, and the office aid. The program's structure, organization, and manner of implementation remain the same as in 1979-1980.

PHYSICAL ENVIRONMENT

In the course of 1980-1981 evaluation, a total of seven school sites were visited, which included all three public high schools and four non-public high schools. All the public high schools are large structures of various ages and degrees of modernity. South Shore High School, a very modern structure, is located on a busy thoroughfare in Brooklyn in a middle to upper-middle class neighborhood which contains one- to four-family dwellings and several apartment-house complexes. Forest Hills High School, a somewhat older but nonetheless rather well kept-up building, is located on a quiet, tree-lined street in fairly similar surroundings in Queens. Abraham Lincoln High School, a much older building, is located in a highly culturally mixed Brooklyn neighborhood, surrounded by apartment houses. The non-public schools are housed in a great variety of buildings and neighborhoods. These range from one- or two-story brick school houses of a dozen or more rooms, usually appended to a cultural center or house of worship and located in a quiet, ethnically homogeneous, middle-class neighborhood, to a school occupying several floors in a high-rise

building, housing a cultural and religious center, located right in the midst of an old downtown area. In all cases, however, the facilities available to the students in the program ranged from adequate to excellent.

The central office occupies a two-room suite in South Shore High School. It is in a modern, well-appointed building and is served by an automatic elevator. The first or anteroom has adequate desk space for the receptionist-office aide, the secretary, the community liaison teacher, and the curriculum specialist, as well as, occasionally, the grade advisor, when she is not out visiting the other sites. The other room is occupied by the program director and an impressive reference library. There is also a secure storage area, as well as typewriters, a photoduplicator, and assorted office machines. There are two outside telephone lines and a wall of windows which open into a spacious courtyard. This location also has the distinct advantage of being almost at the center of the program's eleven sites, all of which can be easily reached by car. An alternate location for the program's central office is in P.S. 188 on the lower east side of Manhattan. Besides being distant from all the sites served by the program, this location is in a very old building where quarters appear cramped and amenities minimal. There are two advantages for this location: first, it is closer to the New York City Board of Education central office building; and, second, P.S. 188 also houses the central offices of other New York City bilingual programs, as well as some components of their central staffs.

DEMOGRAPHIC CONTEXT

Sociologically, there appears to be very little difference from site to site among students served by the program. They all share the same difficult economic condition and come generally from the same ethnic background. The only significant observable difference between them is in the degree of their acclimatization, acculturation, and eventually, integration into American society. This, however, depends directly on the length of their stay in the United States and the degree to which they and their families have opened themselves up to the inevitable influence of the American environment. Students' mobility, likewise, is a problem which affects most sites and in the same way: sporadic arrivals of immigrant children in the United States throughout the school year require their quick absorption into the program practically at any time. Similarly, families whose breadwinners obtain work in other parts of the country frequently move out of New York on a very short notice and without waiting for the end of the school year. Such moves account for most of the turn-over of the participants in the program.

Community resources which support -- and in some cases are structurally bound to -- the sites are of two kinds. First, there are the resource community centers, which are inextricably bound with the three public schools involved in the program:

1. Service Center for Russian Immigrants
   98-37 65th Avenue
   Rego Park, N.Y. 11374 (For: Forest Hills High School)

2. Project ARI
   3300 Coney Island Avenue
   Brooklyn, N.Y. 11235 (For: Abraham Lincoln High School)

3. Recreation Rooms and Settlement
Starrett City
1201 Pennsylvania Avenue
Brooklyn, N.Y. 11239 (For: South Shore High School)

These community centers serve the student populations of the public high school, as well as the non-public high school sites of the program. In addition to providing the customary forms of assistance and relief to the Russian immigrants of all ages, they also act as focal points in relationships between the school, the students, their parents, and the local community -- all bound together by the program's family assistant assigned to the center. The centers frequently act as locations for co- or extra-curricular school activities, places where the program's E.S.L. classes for the parents are conducted, and other volunteer services are provided.

Second, there are other community organizations which are not formally associated with the program, but which also provide extensive assistance to the immigrant students and their families. In general, the community at large is very responsive to the needs of the immigrants. Thus, various loci of assistance, both formal and informal, exist around practically every program site.

II. STUDENT CHARACTERISTICS

The student body does not differ markedly from site to site; however, there are frequently considerable linguistic differences among students at a single site. Although for the most part students with some knowledge of English are a rarity, there are a very few students who have studied English in a soviet school or privately, in the U.S.S.R. or abroad, while waiting for the U.S. visa. Rarely, however, do students have a proficiency in English that would allow them to be mainstreamed at once, without any remedial work. More frequently, there is great variation in the students' command of Russian. Almost invariably, idiomatic spoken language predominates over written, grammatical Russian. Usually, the younger the student is at the time of his/her departure from the U.S.S.R. or the longer the wait for an American visa in Rome or elsewhere, the worse is his/her command of standard grammatical Russian. The majority of the students live in the site areas where they are enrolled. A small percentage, less than ten percent, either commute to school or use private transportion operated by the non-public schools.

III. PROGRAM DESCRIPTION

The program objectives as stated in the original proposal and repeated in the 1979-1980 evaluation report (pages 12-13), comprise the articulation of both the philosophy and the goals of the program. Point six of these objectives states the matter most succinctly: "the development of a student body which will become truly bilingual, will incorporate the wealth of their ethnic heritage in the process of gradual adjustment to the American society, and which will serve as a resource for the newly arriving immigrants and bilingual educators." These objectives and principles are universally shared throughout the program.

The program was implemented in the fall of 1979 when its original project proposal, written a year earlier, had been approved for funding. During the program's first year, 1979-1980, two minor changes were made in its personnel structure: two college advisors were replaced with a teacher assigned as community liaison and a teacher assigned as grade advisor, respectively; and two bilingual secretaries were replaced with a school secretary and an office aid. Similarly, one site, a public trade high school, had been deleted.

Prior to the program's inception, all three public high schools and some non-public schools had E.S.L. classes -- taught then as they are now -- by tax levy or privately hired teachers. Moreover, some attempts were made to teach certain content areas in a bilingual mode by tax-levy teachers at Abraham Lincoln High School. This experience has proven quite successful and is being continued, this time with the assistance of the Russian Bilingual Program.

South Shore High School had previously had a Title VII bilingual program which was the first to serve Russian immigrants in the city; it also served students of other linguistic backgrounds. After the establishment of the New York City Russian Bilingual Program, the Russian students at South Shore have been served by the newer program.

The project director routinely visits every site at least once a month. Some sites are visited more frequently than others, especially those serving large numbers of students or requiring her close attention for other reasons. This represents anywhere from six to eleven workdays per month.

The program director oversees the activities of the program staff; coordinates the various components of the program; conducts an ongoing program of instruction for the bilingual staff; receives instructions from higher administrative and policy-making bodies and translates these into specific requirements for her staff; responds to specific queries and demands posed by higher authorities; and, represents the program before all other institutions and levels of authority, including also public relations work. (For a more detailed description, see 1979-1980 evaluation, page 19.)

The services performed by central office personnel include, in addition to routine administration and supervision, the following: curriculum development -- producing instructional and testing materials centrally, as well as developing them at the sites; advising and counseling -- conducting advisement and counseling activities in direct joint sessions with students at the individual sites, as well as providing training to local site personnel; community liaison -- maintaining contact with parents, their committees, and local community groups, supervising after-school community

center activities and offerings, including E.S.L. courses for parents, and compiling and matching lists of target population's needs to those of community resources available to them. (For a detailed description of all these activities, see 1979-80 evaluation report pages 20-21.) Table 2 presents the structure of the New York City Russian Bilingual Program.

Although all the sites are geographically separated and the staff at each is at least in part answerable to the administration of the school where it is located, all the sites are tied together administratively, as well as by the various centrally conducted activities and services. Moreover, in addition to sharing centrally provided services, the local site personnel gathers at meetings and workshops conducted at the central office and makes use of its collection of materials and aids. Thus, frequently staff from one site would make use of instructional material prepared at another site. Another form of cooperation and sharing of resources by the various sites stems from the fact that each of the three community centers which participate in the program not only serves the community of a participating public high school to which it is in a sense dedicated, but also provides the same kind of supportive services, including E.S.L. classes for parents, to the populations of the participating non-public high schools which are located close by.

Table 2. Structure of New York Russian Bilingual Program.

NAME OF SITE	PROGRAM PERSONNEL AT SITE (LIST POSITIONS)	CENTRAL STAFF VISIT/CONTACT	
Abraham Lincoln High School	1 Resource Teacher 1 Educational Assistant 1 Family Assistant (the "local site team")	Project Director Grade Advisor Community Liaison	1 x mo 1 x wk 1 x mo
Forest Hills High School	"local site team"	"	"
South Shore High School Central Program Components at this site: 1. Administration 2. Supportive Services 3. Curriculum Development 4. Staff Development	Central Program Personnel at this site: 1 Program Director 1 Curriculum Specialist 1 School Secretary 1 Teacher Assigned Community Liaison 1 Teacher Assigned Grade Advisor 1 Office Aid "local site team"	"	"
Lubavitcher High School	1 Educational Assistant	"	"
Beth Rivkah	"	"	"
Yeshiva of Flatbush	"	"	"
Yeshivot Haramah	"	"	"
Solomon Schechter	"	"	"
Ezra Academy of Queens	"	"	"
Forest Hills Mesifta	"	"	"
Ba'er Hagolah Institute	"	"	"

IV. INSTRUCTIONAL COMPONENT

STUDENT PLACEMENT AND PROGRAMMING

Identification, screening, testing, and enrollment of potential participants in the program are carried out in the manner established in 1979-1980. Program students are usually identified at the time of registration during an interview or a records check conducted by the high school grade advisor (counselor) and/or a member of the program site team. The most common procedure in most participating high schools is to channel all recent arrivals from the U.S.S.R. to the program's resource center room. There they are administered the Language Assessment Battery (LAB) examination and the Reading Subtest of the Stanford Achievement Test (SAT). Those who score below the twenty-first percentile on the LAB test and who are reading below grade level in English, as determined by the SAT Reading Subtest, are placed in the bilingual program. These procedures were uniformally followed in all participating public high schools. In non-public high schools, the decision to enroll a student in the program is usually made after the required testing, but following a less formal evaluation of his or her command of English.

Since the program's "local site team" consists of only two instructional members in the public high schools and comprises only one such person in the non-public ones, it is frequently necessary to discriminate a prospective student's ability according to the very simple "can cope -- cannot cope" criterion, leaving aside any attempts at a finer deliniation. Students' characteristics and ability levels are considered when they are programmed for participation in E.S.L. and content-area courses, as well as

in native language courses (in some instances). E.S.L. placement is made on the basis of the students' proficiency in English, while placement in content-area subjects is made according to the students' grade level and the instructional level of the material to be presented.

CLASSIFICATION AND MAINSTREAMING

On the whole, there is considerable flexibility in programming students in both public and non-public high schools. A student is not mainstreamed fully or partially or assigned to any group against his wishes. Students who have problems are reevaluated and given extra help or are advised to transfer downwards; those who are consistently doing very well are encouraged to move up. Problems of adjustment at mainstreaming are minimized as all students are partially mainstreamed at all times. The program has a conscious policy of not separating the program population from its peers. Program participants are being constantly prepared for eventual total mainstreaming by gradually increasing the extent of English usage in content-area classes and moving toward greater sophistication in remedial English courses.

Judging from conversations with students in the public high schools, they are quite eager to enter the mainstream, but are reluctant to sever their ties with the program completely. Otherwise completely mainstreamed students like to visit the resource room, to read Russian books or magazines, to talk with their friends and teachers, and to do peer tutoring. In addition to softening the transition for the student and allowing him or her to continue receiving supportive services and enjoying co-curricular activities, such an arrangement also facilitates follow-ups and the rendering of assistance if such should prove necessary. The extent to which informal ties are maintained

depends directly on the drawing power or charisma of the individual resource teacher or educational assistant at a given site. In this sense, then, no student is really completely mainstreamed and cut off from the program.

Although it is too early for the program to have formulated definitive exit criteria, it is planned that the transition to the mainstream should be made as painless as possible. Consequently, it is planned that the guidance staff of the program will continue to be available for consultation and will be in contact with mainstream teachers to determine and evaluate student progress. In cases of need, the resource teachers, bilingual teachers, and paraprofessionals will be available for consultation, tutoring, and other help. The tutorial services of the after-school community component will be available to students who have been mainstreamed. These students will be invited and encouraged to participate in after-school cultural presentations and activities to maintain cultural contact with other members of their ethnic group and to become effective liaisons between the target program population and the mainstream students. Finally, it is planned that the students who receive content education in mainstream classes will be able to participate in native language arts classes and classes dealing with American native culture and history.

Among the considerations being studied for the purpose of formulating the exit criteria are the following: the statutory LAB Test criterion; professional judgement; achievement test performance; home language backgrounds; English language proficiency assessment; any other information important for educational placement.

INSTRUCTIONAL OFFERINGS

Instructional offerings at the individual sites do not so much reflect the characteristics or need of the student populations at those sites, as they do the availability of resources, both human and material.

Aside from considerations of budget and availability of a very unique kind of personnel, much depends on the individual interests, experiences and strengths of the one or two persons comprising the "local site team." Thus, curricular variations from site to site may reflect the differing outlooks of the members of the team at each site. While all program staff "move in the same general direction," staff members have the freedom to create materials and approaches they feel will be effective. That is to say, there is general agreement on content and policy, and considerable flexibility at the sites.

The situation is quite similar with regard to native culture and language arts. Different people stress different things. There is general uniformity, but not identity at various sites. In this regard, co-curricular activities organized by the central office provide a solid common platform for the program's overall undertakings in this area.

Table 3 presents an overview of the bilingual services available at all eleven sites of the New York City Russian Bilingual Program.

In public high schools, there are three groups of subjects which are included in the bilingual education program, though not all of them are taught in the bilingual mode. At two opposite poles stand E.S.L. and native language arts. The first is taught in English, while the second is presented almost exclusively in Russian. It is only in the third group, the content-area subjects, where bilingualism is truly practiced. Bilingual instruction

Table 1. Overview of bilingual services at New York City Russian Bilingual Program sites.

	SITE 1			SITE 2			SITE 3			SITE 4			SITE 5			SITE 6			SITE 7			SITE 8			SITE 9			SITE 10			SITE 11			SITE 12		
NAME OF SITE	CENTRAL			FOREST HILLS			LINCOLN			SOUTH SHORE			SOL. SCHECH			EZRA AC			BE'ER HAG			YESH FLATBUSH			UNITED LUBA.			YESH. HARAMAH			BETH RIVKAH			F. H. MESIFTA		
Instructional Component	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF
English as a Second Language						1*			1*			1*			*			*			*			*			*			*			*			*
Reading (English)						1*			1*						*			*			*			*			*			*			*			*
Resource Teach/ Native Language						1			1			1																									
Bilingual Math						1*																															
Bilingual Science						1*																															
Bilingual Social Studies						1*			1*			2*																									
Ed. Asst.						1			1			1			1			1			1			1			1			1			1			1

Non-Instructional Component	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF	YES	NO	# STAFF
Administration			2																																	
Supportive Services			1																																	
Curriculum Development			1																																	
Staff Development			1																																	
Parent/Community			1			1			1			1																									
Other:																																				

* Not part of New York City Russian bilingual program.

in the content areas is offered on an ongoing basis at the three public high schools. Abraham Lincoln and South Shore High Schools primarily offer courses in social studies (hygiene is also offered at the latter site). Forest Hills High School offers bilingual courses in social studies, science, mathematics, and music. Table 6 presents the courses offered bilingually to participating students, by site.

When there is no Russian-speaking tax-levy content-area subject teacher, an ad hoc team is essembled comprising a content-area subject teacher experienced in teaching foreign-born students and the Russian bilingual program's resource teacher or educational assistant, called upon to act as a "linguistic facilitator" either during class or after it.

By the same token, there are three ways in which the "local site team" does normally provide bilingual instruction to the students in the program. The first way is by giving tutoring or remedial help to a student enrolled either in a quasi-bilingual course of the type discussed above or in a course given especially for foreign-born students, including E.S.L. The second type of instruction is the kind given to students enrolled in mainstream classes, but in need of additional help. Lastly, there is instruction in native language arts which is the "maintenance and development component" of the bilingual program.

In public high schools, there are normally five possible times during the school day when this instruction may be scheduled: before the beginning of classes; during the study period, if such is allowed; during the second half of the lunch period; immediately after the end of classes; and during an especially scheduled "bilingual studies period." The latter is normally devoted to instruction in native language arts.

In non-public schools, the latitude of action is considerably wider. It ranges from highly structured classes with lesson plans, sometimes with whole days or afternoons devoted to bilingual instruction or instruction in native language arts, to one-on-one tutoring, depending on the size of the site's program population and the demand on the educational assistant's time.

Tables 4, 5, and 6 present the E.S.L., native language arts, and bilingual content-area courses offered at the three public school sites.

Table 4. Instruction in English as a second language.

COURSE TITLE AND LEVEL	NUMBER OF CLASSES	AVERAGE CLASS REG.	CLASS PERIODS PER WEEK	DESCRIPTION
Abraham Lincoln				
E.S.L. A	1	20	10	Basic
B	1	22	10	Intermediate
C	1	29	10	Advanced
D	1	29	10	Transitional
	2	21	5	
Forest Hills				
E.S.L. A	1	35	5	Beginner's
B	1	35	5	Intermediate
C	1	35	5	Advanced
South Shore				
E.S.L.-QE-A	1	15	5	Basic
B	2	20	5	Intermediate
C	1	25	5	Advanced
D	1	12	5	Transitional

Table 5. Instruction in native language arts.

Abraham Lincoln Language and Literature	2	18	5	Teacher prepared materials and books.
Forest Hills Russian Cultural Heritage				
Level I	1	20	5	Course for new students using teacher-prepared materials.
Level II	1	20	5	Independent reading, weekly reports using library books.
Advanced	1	10	5	Independent reading, for 11th and 12th grade using Pushkin's works.
South Shore Russian Literature	1	40	5	Reading and discussion of original Russian literary works using library books.

Table 6. Bilingual instruction in content areas.

COURSE TITLE	NUMBER OF CLASSES	AVERAGE REGISTER	PERCENT OF RUSSIAN/ENGLISH USE	HOURS PER WEEK	CRITERIA FOR SELECTION OF STUDENTS	TYPE OF CREDIT	% OF MATERIALS IN NATIVE LANGUAGE	DO MATERIALS CORRESPOND TO MAINSTREAM CURRIC?	ARE MATERIALS APPROPRIATE TO STUDENTS' READING LEVEL?	COMMENTS
Abraham Lincoln American History	1	18	80/20	5	Lab test and interview	Regents	80	Yes	Yes	
World History	1	15	80/20	5	"	"	50	Yes	Yes	
Forest Hills Social Studies I	1	35	-/100	5	Chairman's decision selection by need	Not regents preparatory	10-15	Not Fully	Yes	Frequent help needed with terminology
II	1	35	-/100	5		"	"	"	"	"
III	1	35	-/100	5		"	"	"	"	"
General Science and Biology	8	20	-/100	5	Ability	Regents	10-15	"	"	"
Social Studies	7	20	-/100	5	"	"	"	"	"	"
Mathematics	7	20	-/100	5	"	"	"	"	"	"
Music	3	10	-/100	5	"	"	"	"	"	"
South Shore American History	2	36	30/70	5	E.S.L.QE-C Test Results and Interviews	Regents	20	Yes	"	
Economics	1	32	40/60	5	"	"	10	"	"	Use newspaper texts
World History	1	30	40/60	5	"	"	10	"	"	
Personal Hygiene	1	42	20/80	5	"	"	10	"	"	

V. NON-INSTRUCTIONAL COMPONENT

CURRICULUM DEVELOPMENT

The program is involved in curriculum development, which includes the preparation of both instructional and testing materials. These are being produced at two levels. Instructional and testing materials which are to be used program-wide are being developed centrally under the immediate supervision and direction of the program director and the curriculum specialist. The individual resource teachers are also responsible for the preparation of materials which respond to the needs of the resource centers in the individual public high schools. Curricula and other educational materials prepared locally may be submitted to the central office for approval and, if such is secured, adopted for program-wide use. All newly developed materials whether produced centrally or developed locally and approved by the curriculum specialist are immediately disseminated throughout the program and to others who request them.

As the only Title VII program currently funded to serve Russian immigrants, the staff members have had few curricular resources to draw upon. With the exception of materials developed by the South Shore bilingual program in an earlier funding cycle, there were no materials developed earlier which could be immediately used in the Russian bilingual program. However, many materials from other New York City bilingual programs, such as those in Spanish, were used as prototypes after which the Russian program's materials were patterned.

During 1980-1981, the program's staff has developed curricula in Russian native language arts, western civilization, American studies, economics, and bicultural ethnic heritage studies. Curricula include pre- and post-tests, course outlines, lesson plans, and suggested curricular resource materials. Additions to the Russian heritage series included a piece on the holidays of the Russian people, a Russian dissident literature overview, and a comprehensive survey of Russian art. Developed locally, but adopted program-wide were glossaries and idiomatic phrase books which provided a ready translation of terms in mathematics and the natural sciences. To facilitate evaluation and pilot-testing of the prepared components of the curriculum, a battery of tests has been prepared. At the same time, inventory was initiated to produce an accurate picture of educational and curricular materials held locally in the resource rooms at the individual sites.

At present there are four main resource repositories in the program. Three of these are in the resource rooms of the three public high schools. Some of them contain small libraries of books and magazines, as well as duplicated instructional material. The program's central office contains a resource repository which, after inventorying and cataloging materials in the other resource collections at the sites, will provide access to a unified collection of instructional and curricular materials which will be the largest and the most comprehensive assembly of materials of its kind.

SUPPORTIVE SERVICES

The bilingual grade advisor, who is a member of the central staff, conducts regular periodic visits to all the sites in the program to provide counseling and guidance either individually or in groups, depending on the

need. Other supportive services are of three kinds: personnel are invited by the central office to visit one or more sites and to render assistance there; one or two individual sites invite a supportive service professional to address their pupil population as a guest lecturer; and assistance is requested from the local community center which is associated with a given site or a group of sites. The supportive service professional is then invited by the community center to speak or conduct a seminar and thus make himself available to the program population. In this way, assistance may be readily obtained in most areas, from questions on the psychology of adolescence to the arcane world of college admissions and career counseling. All sites have an equal oppportunity to make use of this procedure in time of need.

The central program staff normally does not make home visits, but both the program director and the teacher assigned as community liaison do frequently make phone calls to parents of students enrolled in the program. Such calls normally deal with matters that cannot be resolved by the family assistants who are attached both to the public high schools and the community centers which assist them. For example, the question might deal with placement of a student in a day or summer camp, organizing a "fresh air" weekend, or finding a part-time job. All this represents a very important aspect of the program's service to its population, which normally goes unnoticed.

The focal point of most of all specialized supportive services to the program's population is the community center which is associated with a given site, and access to the community center is open to all immigrants who are in need. There are really no supportive services which are available to other students that would not be available to the program population, since in addi-

tion to the rather unique opportunities provided by access to the community centers, all program students have access to their school's supportive service professionals, and in case of language difficulties, the program's "local site team" is right there, ready to help.

STAFF DEVELOPMENT

There are three areas which involve staff development. The first, and the most unstructured activity involves supervision of the staff's daily activities by another, senior staff member. Finally, the entire staff is supervised by the program director. Ultimately, this leads to evaluation of performance and determination of fitness. A slightly more structured form of staff development is by means of workshops, discussions, seminars, and presentations by guest speakers. Finally, the most structured is a formal educational program at a college or a university. In all three areas the program director plays a central role. It is the program director's function to provide on-the-job training and to evaluate its result. The workshops are also the responsibility of the director. Lastly, by insisting that members of the staff take specific courses and programs for which they are fully or partially reimbursed, the program director is intimately involved in the development of the program's staff. Table 7 lists the staff development activities conducted at the central office site and Table 8 presents the university courses attended by program staff. Thirteen parents also received university training supported by the program.

Table 7. Staff development: central activities.

ACTIVITY	TOPIC	FREQUENCY OF OCCURRENCE	OBJECTIVE
ORIENTATION	Prizel's lecture on Alexander Grim General Information Horowitz lecture	Oct. 31 Nov. 7 Nov. 21	
WORKSHOPS FOR ALL	General Information	Dec. 19 Jan. 30 Feb. 27 Mar. 27 Apr. 24 May 29 Jun. 19	Provide in-service training; familiarize with new developments
WORKSHOPS FOR EDUCATIONAL ASSISTANTS	General Information Medical Insurance Parents' Committee Internal Information	Dec. 12 Jan. 16 Feb. 20 Mar. 13 Apr. 24 May 15 Jun. 12	
GUEST LECTURERS	Bilingual Education Data Recording Forms	Jan. 23 Apr. 10 May 1	
WORKSHOPS FOR FAMILY ASSISTANTS		Dec. 5 Jan. 9 Feb. 6 Mar. 6 Apr. 3 May 8 Jun. 5	

Table 8. Staff development: University courses attended by staff.

STAFF	INSTITUTION	COURSE(S)
Resource Teacher	Columbia University	Tesol Method (3), Tesol classroom behavior focus (3)*
Resource Teacher	Long Island University	Learning in an urban setting (3)
Bilingual Teacher	Brooklyn College	Use and interpretation of intelligence (2)
Bilingual Teacher	New York University	Modern standard Russian phonology (6)
Resource Teacher	Columbia University	Counseling (2), Use of camera in education (2)
Teacher	Touro College	Principles of Economics (3)
Teacher		Amoraic Literature (3), Jewish Apocalyptic Thought (3)
Project Director	Long Island University	Mainstreaming inner city youngsters (3)
Community Liason	Long Island University	The exceptional child (3)
Curriculum Developer	Long Island University	The exceptional child (3)
Resource Teacher	Long Island University	Methods and materials of teaching English (3)
		Cultural pluralism in education (3)
Teacher	Brooklyn College	Speech problems of the mentally retarded (3)
Eight Parents	Brooklyn College	E.S.L.
Parent		Development Skills
Four Parents	Long Island University: English Language Institute	E.S.L. (3)
Paraprofessional	Columbia University	Designing curriculum and instruction (3)
Paraprofessional	Brooklyn College	TESL (3), Introduction to Computing (4),
		Child and Youth in Schools (8)
Paraprofessional	Brooklyn College	TESL (3), Introduction to Computing (4)
Paraprofessional	New York University	Black and Puerto Rican Life Styles (6)
Paraprofessional	Brooklyn College	Special Problems in Education ( )
Paraprofessional	Long Island University	The Challenge of Teaching (3)
Paraprofessional	Long Island University	English as a Second Language (6) (5)
Paraprofessional	Brooklyn College	Mental Retardation in Children; Concept of Family (6)
Paraprofessional	Brooklyn College	Mental Retardation in Children; Concept of Family (6)
Paraprofessional	English Language Inst.	Theory of current design (3);
		other courses (1) (3) (1) (1) (1)

*The number in parentheses indicates the number of credits taken.

STAFFING PATTERN

The staffing picture has not changed in any significant way since 1979-1980. All positions are filled and no one is functioning out of license. The scheduling of staff time at the sites is both rigid and flexible, depending on the situations. Some activities must be carried out at scheduled times, but flexibility is maintained at others.

The program employs two kinds of paraprofessionals: educational assistants and family assistants. Both are technicians, both have the language skills and some requisite training. Although they are supposed to function under close supervision by professionals -- the resource teachers and the teacher assigned as community liaison -- in reality they master very quickly what is required of them, and then continue to move on their own initiative within the confines of their job. Most bilingual paraprofessionals have college degrees and are very well qualified for their position. Many educational assistants who have been assigned as the program's standard-bearers to non-public high schools (where no project person supervises them on a daily basis) acquit themselves with distinction. Consequently, the paraprofessional continues to hold a very important functional position in this program. Table 9 presents the characteristics of the professional and paraprofessional staff of the bilingual program.

PARENTAL AND COMMUNITY INVOLVEMENT

Parent Advisory Committees exist at the program's central office level and within each of the public high schools. They act as additional conduits for the views and concerns of the parents. The committee is usually formed by those who are present at the constituent meeting. The members

Table 9. Title VII staff characteristics: professional and paraprofessional staffs

STAFF MEMBERS	APPT'D TO EACH FUNCTION	EDUCATION (DEGREES)	CERTIFICATION	LICENSE(S) HELD	YEARS OF EXPERIENCE (MONOLINGUAL)	YEARS OF EXPERIENCE (BILINGUAL)	YEARS OF EXPERIENCE (E.S.L.)	OTHER RELEVANT PAST TRAINING
Project Director	11/79	B.A. M.A.	N.Y.C. N.Y.S.		10 yrs.	5 yrs.		M.A. (Russian) M.A. (Guidance) M.A. equiv. (Spanish)
Teacher Assigned: Community Liaison	12/79	M.A. Equiv.						
Teacher Assigned: Grade Advisor	9/80			P.D.T. License	21 yrs.	5 yrs.		
Curriculum Specialist	2/80	Ph.D.		Teach. Cert. (Israel)	14 yrs.	16 yrs.		Russian Language and Literature
School Secretary	9/80							
Office Aide	8/81							
Resource Teacher	12/79	M.A. equiv.			24 yrs.	2 yrs.	2 yrs.	
Resource Teacher	12/79	B.A. equiv.			5 yrs.	2 yrs.		
Resource Teacher	12/79	M.A. equiv.			4 yrs.	2 yrs.	1 yr.	
Educational Assistant	1/80	B.A. equiv.						

33

Table 9. (Continued)

STAFF MEMBERS	APPT'D TO EACH FUNCTION	EDUCATION (DEGREES)	CERTIFICATION	LICENSE(S) HELD	YEARS OF EXPERIENCE (MONOLINGUAL)	YEARS OF EXPERIENCE (BILINGUAL)	YEARS OF EXPERIENCE (E.S.L.)	OTHER RELEVANT PAST TRAINING
Educational Assistant	12/79	B.A.			4 yrs.	2 yrs.		
Educational Assistant	2/80	B.A.				2 yrs.		
Educational Assistant	1/80	B.A. M.A.				2 yrs.		
Educational Assistant	1/80	B.A. equiv. M.A. equiv.						
Educational Assistant	12/79							
Educational Assistant	9/80							
Educational Assistant	1/80							
Educational Assistant	9/80							
Family Assistant	9/80							
Family Assistant	1/80							
Family Assistant	1/80							
E.S.L. Teacher	9/80							
E.S.L. Teacher								

usually are quite helpful during the school functions, outings, and trips. Except for the committee at the central office, the local school committees usually pursue their own local interests and do not seek contact with other committees. Parents of students attending non-public high schools do not form their own committees, but join the existing school-wide parents and teachers' organizations.

There exist two programs of adult education which are open to the parents of pupils in the program. First, the program is funding three E.S.L. classes which meet for two hours twice a week in convenient locations, each in the proximity of a public high school and a community center associated with the program. Under the second program, ten of the parents may take up to six credits' worth of university courses each year, paid by the program. In 1980-1981, thirteen parents were so enrolled.

To communicate with its target population, the central office has published a brochure which introduces the new arrival to the United States educational system, the New York Board of Education, and the New York City Russian Bilingual Program. The program has also continued publishing a newsletter which provides an overview of the program and its main activities. In addition to these publications, the central office sends out numerous letters and announcements to all those interested in its work. Two other public high schools publish newsletters which are disseminated in the community. Non-public high schools publish their own newsletters and brochures which contain information about the program, although they are not primarily devoted to it.

Perhaps the most successful aspect of parental and community involvement with the program was the warm response to the program's call for help in

organizing and chaperoning outings, visits, and excursions. With the help of the parents and the community the program was able to organize excursions to the movies, the Broadway shows, to museums, and to the Statue of Liberty.

AFFECTIVE DOMAIN

On the whole, the program has remained remarkably free of vandalism, drug and alcohol abuse, or gang membership.

The program's recent graduates have been accepted to a number of area colleges: Columbia University (2); Queens College (4); Hunter College (2); New York University (8); Brooklyn College (11); Long Island University (2); Yeshiva University (1); Pace University (1). Unfortunately the list of acceptances is incomplete, but representative of student achievement.

Attrition from the program remains as low as in 1979-1980. All students spoken to during the site visits and classroom observation were very enthusiastic about the program; they singled out the opportunity to go to the resource room when troubled and to air their problems in a familiar, friendly, and helpful atmosphere. "It is just like a little piece of home, except that it is right here, at school," one girl said. The only discordant note heard by the evaluator was a grumbling protest: "What? Another questionnaire to fill out? Last week I filled out two. When will they stop and what do they need to know if my father is working for?" But when both the resource teacher and the evaluator explained what it was for and how it helped them to help him, the protest ended and the young man was busy filling out the questionnaire.

VI. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, mathematics, social studies, science, business education, vocational education, practical arts, knowledge of cultural heritage, and improved attitude towards school and American culture.

The following are the areas assessed and the instruments used:

English as a second language -- CREST (Criterion Referenced English Syntax Test, Levels I, II, III)

Russian language -- Program-developed tests

Mathematics -- Program-developed tests

Russian culture and heritage -- Program-developed tests

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Native language arts performance -- Teacher-made tests

Business education -- Teacher-made tests

Vocational education -- Teacher-made tests

Practical arts -- Teacher-made tests

Knowledge of cultural heritage -- Staff-developed tests

Attitude towards school and American culture -- Staff-developed tests

Attendance -- School and program records

The following analyses were performed:

On pre/post program-developed tests of native language achievement, mathematics, and Russian culture and heritage statistical and educational significance are reported.

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant. This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.[1] An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect

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[1] Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.

size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of 1/5 = .20 = small ES

a difference of 1/2 = .50 = medium ES

a difference of 4/5 = .80 = large ES

The instrument used to measure growth in English language was the Criterion Referenced English Syntax Test (CREST), which tests mastery of specific syntactic skills at three levels. Material at the beginning and intermediate levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possesive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four items for each objective. An item consists of a sentence frame for which the student must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered, and the average number of objectives mastered per month of treatment. Students were pre-tested in the fall and post-tested in the spring.

Performance breakdowns are reported in two ways. First, a grade and level breakdown is reported for students who were pre- and post-tested with the same test level. In addition, a grade and test level breakdown is reported for students who were administered a higher level of the CREST when post-tested than when pre-tested. Second, results for the combined

sample are reported for the average number of objectives mastered at pre- and post-testing, and the average number of objectives mastered per month of treatment. For students given different levels of the test at pre- and post-testing, it was assumed that all objectives of the pre-test level were mastered by the time of post-testing. If Levels I and III were used, the additional assumption was made that all Level II objectives were also mastered.

The results of the criterion referenced tests in mathematics, social studies, science, native language arts, business education, vocational education, practical arts, knowledge of cultural heritage, and attitude towards school and American culture are reported in terms of the number and percent of students passing. T-test information is provided on the attendance rate of students participating in the bilingual program compared with the rate of their school's total population. Attendance of participants in non-public schools is not compared with their school population rates due to unavailability of the data.

The following pages present student achievement in tabular form.

Table 10. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered and objectives mastered per month.

(South Shore High School, E.S.L. Title I Russian-speaking students)

GRADE	# OF STUDENTS	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	OBJECTIVES MASTERED *	AVERAGE MONTHS OF TREATMENT	OBJECTIVES MASTERED PER MONTH
10	9	9.9	13.1	3.2	6.59	0.49
11	13	13.2	15.8	2.6	7.04	0.37
12	17	12.9	13.9	1.0	7.16	0.14
TOTALS	39	12.3	14.4	2.1	6.98	0.30

* Post-test minus pre-test.

. The overall average gain was 2.1 objectives or 0.3 objectives mastered per month.

. The average number of objectives mastered by grade ranged from 1.0 to 3.2 and from 0.14 objectives per month to 0.49 objectives per month.

. These rates of gain are generally quite poor when compared to those achieved in other bilingual programs but are due in part to high initial scores which provided little room for demonstrating growth (see next table).

Table 11. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(South Shore High School, E.S.L. Title I Russian-speaking students)

GRADE	LEVEL I N	LEVEL I AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	LEVEL I POST	LEVEL I GAIN*	LEVEL II N	LEVEL II AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	LEVEL II POST	LEVEL II GAIN*	LEVEL III N	LEVEL III AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	LEVEL III POST	LEVEL III GAIN*
10	2	8.5	12.0	3.5	1	20.0	23.0	3.0	6	8.7	11.8	3.1
11	5	11.0	15.4	3.6	2	19.0	22.0	3.0	6	13.0	14.2	1.2
12	1	13.0	15.0	2.0	6	17.2	16.8	-0.4	10	10.3	12.1	1.8
TOTALS	8	10.6	14.5	3.9	9	17.9	18.6	0.7	22	10.6	12.6	2.0

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).
* Post-test minus pre-test.

- Most of the students were at Level III and averaged 10.6 on the pre-test, indicating that ceiling effects would not allow for much gain. The average gain of two objectives at this level represents 45 percent of possible gains for these students.
- Twelfth graders at Level II had a very high average pre-test score (17.2) and lost an average of 0.4 objectives by post-test. This may indicate an error in administration or in coding of data from the test.

Table 12. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered and objectives mastered per month.

(Abraham Lincoln High School, E.S.L. Title I Russian-speaking students)

GRADE	# OF STUDENTS	AVERGE NUMBER OF OBJECTIVES MASTERED PRE	POST	OBJECTIVES MASTERED *	AVERAGE MONTHS OF TREATMENT	OBJECTIVES MASTERED PER MONTH
9	6	12.0	14.7	2.7	7.12	0.38
10	33	12.0	14.0	2.0	6.93	0.29
11	40	16.6	18.4	1.8	7.08	0.25
12	20	13.8	14.5	0.7	7.05	0.10
TOTALS	99	14.3	15.9	1.6	7.03	0.23

* Post-test minus pre-test.

. The overall average gain was 1.6 objectives or 0.23 objectives mastered per month.

. The average number of objectives mastered ranged from 0.7 to 2.7 and from 0.10 objectives per month to 0.38 objectives per month.

. These rather poor results are, in part, attributable to the inappropriate administration of test levels (see next table).

Table 13. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(Abraham Lincoln High School, E.S.L. Title I Russian-speaking students)

GRADE	LEVEL I				LEVEL II				LEVEL III			
	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*
9	2	10.0	16.0	6.0	1	13.0	15.0	2.5	3	13.0	13.7	0.7
10	10	9.2	12.1	2.9	6	14.6	18.7	4.1	17	13.0	13.5	0.5
11	9	17.3	20.8	3.5	19	18.5	20.3	1.8	12	12.9	13.7	0.8
12					2	18.0	19.0	1.0	18	13.3	13.9	0.6
TOTALS	21	12.7	16.2	3.5	28	17.4	19.7	2.3	50	13.1	13.7	0.6

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).
* Post-test minus pre-test.

- Most of the students (50) were at Level III and averaged 13.1 objectives on the pre-test, causing a ceiling effect that limited the gains possible.
- The Level II pre-test scores averaged 17.4, which also restricted possible gains to a maximum of 7.6 objectives.
- The Level I pre-test scores averaged 12.7, allowing for more room for growth. However, this group contained only 21 percent of the total population.

Table 14. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered and objectives mastered per month.

(Forest Hills High School, E.S.L. Title I Russian-speaking students)

GRADE	# OF STUDENTS	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	OBJECTIVES MASTERED *	AVERAGE MONTHS OF TREATMENT	OBJECTIVES MASTERED PER MONTH
9	28	14.0	14.9	0.9	7.20	0.13
10	36	13.4	14.8	1.4	7.07	0.20
11	46	14.6	14.4	0.2	7.19	0.03
12	26	13.2	13.8	0.6	7.04	0.09
TOTALS	136	13.9	14.5	0.6	7.14	0.08

* Post-test minus pre-test.

- The overall average gain was 0.6 objectives or 0.08 objectives mastered per month.
- The average number of objectives mastered by grade ranged from 0.2 to 1.4 and from 0.3 objectives per month to 0.2 objectives per month.
- These very poor results are partially due to the administration of levels of the test inappropriately low for student levels of English language knowledge.

Table 15. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(Forest Hills High School, E.S.L. Title I Russian-speaking students)

GRADE	LEVEL I				LEVEL II				LEVEL III			
	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*
9	7	12.3	14.9	2.6	8	16.3	17.1	0.8	13	13.6	13.5	-0.1
10	4	7.3	11.8	4.5	7	17.9	18.7	0.8	25	13.2	14.1	0.9
11					4	22.0	21.5	-0.5	42	13.9	13.8	-0.1
12									26	13.2	13.8	0.6
TOTALS	11	10.5	13.8	3.3	19	18.1	18.6	0.5	106	13.5	13.8	0.3

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).
* Post-test minus pre-test.

- The overwhelming majority of students (78 percent) were tested with Level III and averaged 13.5 objectives on pre-test. This caused a ceiling effect which limited potential increases. In addition, the Level II pre-test scores tended to also be quite high.
- Even when testing limitations are taken into consideration, performance by these students was quite poor.

Table 16. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered and objectives mastered per month.

(Non-public high schools, E.S.L. Title I Russian-speaking students)

GRADE	# OF STUDENTS	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	OBJECTIVES MASTERED *	AVERAGE MONTHS OF TREATMENT	OBJECTIVES MASTERED PER MONTH
9	51	9.6	13.3	3.7	6.40	0.58
10	25	7.0	10.7	3.7	6.37	0.58
11	25	6.8	9.8	3.0	6.27	0.48
12	26	8.0	11.1	3.1	6.23	0.50
TOTALS	127	8.3	11.7	3.4	6.26	0.54

* Post-test minus pre-test.

- The overall average gain was 3.4 objectives or 0.54 objectives mastered per month.
- The average number of objectives mastered by grade ranged from 3.0 to 3.7 or 0.48 objectives per month to 0.58 objectives per month.
- Although these results are rather poor when compared to those of other New York City bilingual programs, they are better than those achieved at the public schools in this program and reflect the appropriate use of CREST testing levels.

Table 17. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(Non-public schools, E.S.L. Title I Russian-speaking students)

GRADE	LEVEL I				LEVEL II				LEVEL III			
	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*	N	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	GAIN*
9	10	8.8	12.8	4.0	26	10.8	15.0	4.2	15	8.1	10.7	2.6
10	4	4.0	9.3	5.3	5	9.8	15.4	5.6	16	6.8	9.6	2.8
11	4	0.0	4.8	4.8	1	19.0	23.0	4.0	20	7.5	9.8	2.3
12	1	0.0	10.0	10.0	1	10.0	14.0	4.0	24	8.3	11.0	2.7
TOTALS	19	5.5	10.2	4.6	33	10.9	15.3	4.4	75	7.7	10.3	2.6

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

* Post-test minus pre-test.

- The majority of students were at Level III and averaged 7.7 objectives on the pre-test, gaining 2.6 out of a possible 7.3 objectives on the post-test.
- Students taking Levels I and II generally had appropriately low pre-test scores and demonstrated larger gains than those taking Level III.

Table 18. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered and objectives mastered per month by non-public high school.

SCHOOL	# OF STUDENTS	AVERAGE NUMBER OF OBJECTIVES MASTERED PRE	POST	AVERAGE GAIN	AVERAGE MONTHS OF TREATMENT	OBJECTIVES MASTERED PER MONTH
Solomon Schechter High School	32	18.6	19.3	0.7	6.71	0.10
United Lubavitcher High School	5	18.6	20.4	1.8	6.00	0.30
Yeshivah of Flatbush	16	8.1	10.4	2.3	6.55	0.35
Yeshivat Haramah	33	6.3	10.8	4.5	5.65	0.80
Beth Rivkah High School	10	13.9	14.7	0.8	7.21	0.11
Ezra Academy of Queens	14	15.6	16.6	1.0	7.26	0.14
Forest Hills Mesifta	2	10.0	16.5	6.5		
Be'er Hagolah High School	52	6.3	10.5	4.2	6.08	0.69

- Non-public school gains ranged from 0.7 to 6.5 and from 0.1 to 0.8 objectives per month.
- No attendance data was available for Forest Hills Mesifta.
- Students at Yeshivat Haramah and Be'er Hagolah High School had moderately large gains while those at other schools did less well.

Table 19. Results of the Criterion Referenced English Syntax Test (CREST) for students who pre-tested and post-tested at different levels: number of objectives mastered and objectives mastered per month.

SCHOOL	N	PRE LEVEL	AVERAGE # OF OBJECTIVES MASTERED	POST LEVEL	AVERAGE # OF OBJECTIVES MASTERED	GAIN	AVERAGE MONTHS OF TREATMENT	OBJECTIVES MASTERED PER MONTH
South Shore High School	9	I	16.4	II	14.0	22.6 *	7.08	3.19
Forest Hills High School	2	I	14.5	II	10.5	21.0 *	7.17	2.93
Be'er Hagolah High School	1	I	14.0	II	8.0	19.0 *	6.25	3.04
Beth Rivkah High School	1	I	16.0	II	9.0	18.0 *	6.85	2.63
South Shore High School	7	II	21.0	III	10.6	14.5 *	7.20	2.01
Forest Hills High School	4	II	17.8	III	10.5	17.7 *	7.14	2.48
Abraham Lincoln High School	3	II	19.3	III	21.3	27.0 *	7.12	3.79
Forest Hills Mesifta	2	II	4.0	III	4.5	25.5 *		
Ezra Academy of Queens	6	II	19.0	III	12.0	18.0 *	7.19	2.50
South Shore High School	3	I	21.3	III	11.3	40.0 **	7.27	5.50
Forest Hills High School	2	I	17.5	III	10.5	43.0 **	7.60	5.66

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

Due to change in level from pre-test to post-test it is assumed that the students mastered all the remaining objectives on the pre-test in addition to those mastered on the post-test. Gains are therefore calculated as follows:

* 25 plus post-test minus pre-test.
** 50 plus post-test minus pre-test.

- Due to change in test level, the gains ranged from 14.5 to 43.0 objectives and from 2.01 to 5.66 objectives per month.
- A total of 40 students changed test levels.
- These students generally had high pre-test scores, indicating that it was appropriate to administer a higher level at post-test.
- Gains by these students are considerably larger than those by students not changing level. Part of these differences is probably attributable to the way in which gains were computed for these students (see note above).

Table 20. Native language achievement.

Significance of mean total raw score differences between initial and final test score in native language achievement of students on a program-developed test of native language achievement.

SCHOOL	GRADE	N	PRE-TEST MEAN	PRE-TEST STANDARD DEVIATION	POST-TEST MEAN	POST-TEST STANDARD DEVIATION	MEAN DIFFERENCE	CORR. PRE/POST	t	p	ES
Abraham Lincoln High School	9	6	71.7	12.5	77.5	14.1	5.8	.97	3.80	.01	1.56
	10	28	67.8	11.1	74.8	14.8	7.0	.75	3.78	.001	.71
	11	41	68.4	11.3	77.0	10.9	8.5	.77	7.27	.001	1.14
	12	20	78.0	10.1	82.2	11.1	4.2	.79	2.60	.01	.58
Forest Hills High School	9	26	74.2	22.9	81.5	10.2	7.3	.52	1.89	.04	.37
	10	27	72.4	12.8	79.6	12.3	7.3	.41	2.75	.01	.53
	11	30	78.7	13.9	81.5	10.9	2.8	.62	1.38	NS	.25
	12	14	78.4	11.7	68.3	32.1	-10.1	.53	-1.36	NS	-.36
South Shore High School	10	10	66.9	15.9	68.1	15.1	1.2	.66	.29	NS	.09
	11	8	58.0	22.2	68.5	12.9	10.5	.72	1.89	NS	.67
	12	15	69.5	14.7	76.7	9.4	7.2	.57	2.30	.02	.59
Yeshivot Haramah	9	12	50.8	13.1	58.3	7.4	7.5	.83	3.46	.003	1.00
	10	6	55.0	13.8	63.3	8.2	8.3	.89	2.71	.03	1.11
	11	10	53.0	9.5	62.0	7.9	9.0	.80	5.01	.001	1.58
	12	6	60.0	8.9	63.3	5.2	3.3	.87	1.58	NS	.65
Solomon Schechter High School	9	11	62.2	21.5	79.1	13.6	16.4	.90	4.85	.001	1.46
	10	8	88.8	9.9	95.0	5.3	6.2	.94	3.42	.06	1.21
	11	7	94.3	7.9	97.1	4.9	2.9	.81	1.55	NS	.59
	12	5	84.0	11.4	96.0	5.5	12.0	.72	3.21	.02	1.44
Ba'or Hagolah High School	9	26	67.8	5.9	71.1	5.6	3.4	.95	9.30	.001	1.82
	10	10	70.2	5.1	73.0	5.8	2.8	.95	4.58	.001	1.45
	11	7	72.6	6.2	74.9	6.1	2.3	.94	2.83	.02	1.07
	12	9	76.4	5.3	78.9	4.9	2.4	.97	5.50	.001	1.83

Table 20. Native language achievement (continued).

Significance of mean total raw score differences between initial and final test score in native language achievement of students on a program-developed test of native language achievement.

SCHOOL	GRADE	N	PRE-TEST MEAN	PRE-TEST STANDARD DEVIATION	POST-TEST MEAN	POST-TEST STANDARD DEVIATION	MEAN DIFFERENCE	CORR. PRE/POST	t	p	ES
Ezra Academy of Queens	9	13	55.7	22.1	64.5	24.3	8.8	.82	2.26	.03	.63
	TOTAL	19	57.6	19.7	67.7	21.4	10.1	.81	3.44	.01	.79
Yeshiva of Flatbush	TOTAL	16	71.3	14.5	78.1	12.8	6.9	.95	5.74	.001	1.44
Beth Rivkah High School	TOTAL	8	69.8	9.2	64.0	20.1	-5.8	.52	-.94	NS	-.33
Forest Hills Mesifta	TOTAL	5	55.0	18.4	63.0	16.5	8.0	.25	.84	NS	.38
United Lubavitcher Yeshivot	TOTAL	5	86.0	0.0	86.0	0.0	0.0	-	-	-	-

- Pre-test means range from 53.0 to 94.3.
- Post-test means range from 62.0 to 97.1.
- Of 28 comparisons made, 20 were statistically significant.
- There were two cases in which students performed better on the pre-test (Forest Hills High School-twelfth grade and Beth Rivkah High School-overall), but these differences were not statistically significant.
- The educational significance of the results are as follows:

  one case of small educational significance (less than .20)

  five cases of medium educational significance (.20-.50)

  nine cases of large educational significance (.51-.80)

  thirteen cases of very large educational significance (greater than .80)

- The data for United Lubavitcher Yeshivot indicated that all students had exactly the same scores, on both pre-test and post-test.
- The relatively low pre-test - post-test correlations in the data from Forest Hills, South Shore, and Beth Rivkah High Schools, the negative changes mentioned above, and similar findings on other tests for these three schools, suggest that these may have been errors made in testing procedures or in data reporting at these schools.

Table 21. Mathematics achievement.

Significance of mean total raw score differences between initial and final test score in mathematics achievement of students on a program-developed test of mathematics achievement.

SCHOOL	GRADE	N	PRE-TEST MEAN	PRE-TEST STANDARD DEVIATION	POST-TEST MEAN	POST-TEST STANDARD DEVIATION	MEAN DIFFERENCE	CORR. PRE/POST	t	p	ES
Abraham Lincoln High School	9	6	63.3	16.3	75.0	16.4	11.7	.75	2.44	.03	1.00
	10	28	65.5	17.5	72.1	15.5	6.6	.86	3.87	.001	.73
	11	41	74.4	17.6	80.0	14.7	5.6	.79	3.35	.001	.52
	12	20	83.5	14.5	88.0	13.2	4.5	.92	3.46	.002	.77
Forest Hills High School	9	28	59.8	21.0	73.8	20.9	13.9	.43	3.30	.002	.62
	10	28	70.1	21.1	79.4	18.0	9.3	.68	3.09	.003	.58
	11	30	76.0	18.1	88.3	13.1	12.3	.70	5.20	.001	.95
	12	13	76.9	23.2	83.1	31.2	6.2	-.34	.50	NS	.14
South Shore High School	10	11	59.1	25.5	60.9	29.5	1.8	.38	.19	NS	.06
	11	8	72.5	21.9	75.0	7.6	2.5	.26	.33	NS	.12
	12	15	76.7	25.5	80.0	16.1	3.3	.52	.59	NS	.15
Yeshivat Haramah	9	12	50.0	12.1	61.7	14.0	11.7	.81	4.84	.001	1.40
	10	6	61.7	9.8	70.0	8.9	8.3	.91	5.00	.002	2.04
	11	10	59.0	15.2	65.0	13.5	6.0	.89	2.71	.02	.46
	12	6	63.3	12.1	66.7	5.2	3.3	.85	1.00	NS	.41
Solomon Schechter High School	9	11	80.9	25.1	88.1	14.0	7.3	.94	1.90	.05	.57
	10	8	90.0	13.1	96.2	7.4	6.3	.88	2.38	.03	.84
	11	7	88.5	16.8	94.3	9.8	5.7	.96	1.92	NS	.73
	12	5	86.0	5.5	98.0	4.5	12.0	.61	6.00	.002	2.68
Ba'er Hagolah High School	9	26	80.2	8.7	76.0	7.8	4.2	.83	4.46	.001	.87
	10	10	81.0	11.0	85.0	7.1	4.0	.93	2.46	.02	.77
	11	6	80.0	8.9	84.2	9.2	4.2	.85	2.08	.05	.85
	12	9	85.6	7.3	86.1	7.0	0.6	.97	1.00	NS	.33

Table 21. Mathematics achievement (continued).

Significance of mean total raw score differences between initial and final test score in mathematics achievement of students on a program-developed test of mathematics achievement.

SCHOOL	GRADE	N	PRE-TEST MEAN	PRE-TEST STANDARD DEVIATION	POST-TEST MEAN	POST-TEST STANDARD DEVIATION	MEAN DIFFERENCE	CORR. PRE/POST	t	p	ES
Ezra Academy of Queens	9	13	59.9	25.4	69.4	20.3	9.5	.78	2.14	.03	.59
	TOTAL	20	63.0	25.5	71.1	22.7	8.2	.78	2.23	.02	.50
Yeshiva of Flatbush	TOTAL	16	74.4	20.0	78.8	16.3	4.4	.96	2.78	.01	.70
Beth Rivkah High School	TOTAL	8	58.8	31.4	72.5	18.3	13.8	.55	1.49	NS	.53
Forest Hills Mesifta	TOTAL	5	50.0	20.0	52.0	23.9	2.0	.62	.23	NS	.10
United Lubavitcher Yeshivot	TOTAL	5	86.0	0.0	86.0	0.0	0.0	-	-	-	-

- Pre-test means range from 50.0 to 90.0.
- Post-test means range from 52.0 to 98.0.
- Of 28 comparisons made, 19 were statistically significant.
- Students made gains in all comparisons except at United Lubavitcher Yeshivot where all students had exactly the same score, on both pre-test and post-test.
- The educational significance of the results are as follows:

  five cases of small educational significance (less than .20)

  three cases of medium educational significance (.20 - .50)

  eleven cases of large educational significance (.51 - .80)

  nine cases of very large educational significance (greater than .80)

- Correlations of pre-test and post-test scores were positive and large for all groups except those at Forest Hills, (ninth and twelfth graders only), South Shore, Beth Rivkah and United Lubavitcher. Poor correlations at these locations, where results were generally not significant suggest that either the test(s) used was not a reliable or appropriate measure for these students, or that data was incorrectly reported.

Table 22. Russian culture and heritage achievement.

Significance of mean total raw score differences between initial and final test scores in Russian culture and heritage achievement of students on a program-developed test of Russian culture and heritage.

SCHOOL	GRADE	N	PRE-TEST MEAN	PRE-TEST STANDARD DEVIATION	POST-TEST MEAN	POST-TEST STANDARD DEVIATION	MEAN DIFFERENCE	CORR. PRE/POST	t	p	ES
Abraham Lincoln High School	9	6	68.3	22.1	78.3	13.3	10.0	.87	2.00	NS	.82
	10	28	72.3	17.7	76.4	15.7	4.1	.91	2.91	.004	.56
	11	41	68.0	21.0	78.9	13.3	10.9	.66	4.40	.001	.69
	12	20	73.0	12.0	82.5	11.6	9.5	.74	4.96	.001	1.11
Forest Hills High School	9	28	55.2	21.8	62.9	21.3	7.7	.59	2.08	.03	.39
	10	27	60.2	20.2	76.1	15.2	15.9	.37	4.09	.001	.79
	11	30	74.0	14.5	80.2	13.0	6.2	.41	2.26	.02	.41
	12	13	82.3	10.1	76.5	26.3	-5.8	-.25	-.68	NS	-.19
South Shore High School	10	11	64.5	15.7	55.5	23.0	-9.1	-.80	-.87	NS	-.26
	11	8	66.0	17.7	71.3	13.6	6.3	.51	1.11	NS	.39
	12	15	74.7	14.1	76.7	15.0	2.0	.08	.39	NS	.10
Yeshivat Haramah	9	12	52.5	14.2	62.9	12.5	10.4	.93	7.04	.001	2.03
	10	6	44.3	14.3	55.8	14.6	11.5	.98	10.88	.001	4.44
	11	10	55.6	13.2	68.1	12.0	10.5	.96	9.07	.001	2.87
	12	6	55.0	21.0	64.3	17.3	9.3	.97	3.72	.007	1.52
Solomon Schechter High School	9	11	68.2	24.4	76.4	18.0	8.2	.98	3.61	.003	1.09
	10	8	76.2	15.1	83.8	9.2	7.5	.95	3.00	.01	1.06
	11	7	92.9	4.9	95.7	5.3	2.9	.55	1.55	NS	.59
	12	5	84.0	8.9	98.0	4.5	14.0	.88	5.72	.003	2.56
Ba'er Hagolah High School	9	26	67.7	7.1	74.2	5.8	6.5	.73	6.87	.001	1.36
	10	10	69.0	5.7	78.0	6.3	9.0	.87	9.00	.001	2.85
	11	7	71.4	10.7	78.6	7.5	7.2	.97	4.80	.002	1.81
	12	9	68.9	6.0	77.8	4.4	8.9	.84	8.00	.001	2.67

Table 22. Russian culture and heritage achievement (continued).

Significance of mean total raw score differences between initial and final test scores in Russian culture and heritage achievement of students on a program-developed test of Russian culture and heritage.

SCHOOL	GRADE	N	PRE-TEST MEAN	PRE-TEST STANDARD DEVIATION	POST-TEST MEAN	POST-TEST STANDARD DEVIATION	MEAN DIFFERENCE	CORR. PRE/POST	t	p	ES
Ezra Academy of Queens	9	13	28.2	21.9	40.0	21.5	11.7	.78	2.57	.02	.71
	TOTAL	19	36.2	23.4	45.3	25.7	9.1	.78	2.4	.02	.55
Yeshiva of Flatbush	TOTAL	16	49.5	18.8	60.6	18.1	11.1	.95	7.38	.001	1.85
Beth Rivkah High School	TOTAL	8	46.3	14.1	48.1	17.7	1.9	-.23	.21	NS	.07
Forest Hills Hasifta	TOTAL	5	32.0	13.0	42.0	24.9	10.0	.60	1.12	NS	.50
United Lubavitcher Yeshivot	TOTAL	5	86.0	0.0	86.0	0.0	0.0	-	-	-	-

- Pre-test means ranged from 28.2 to 92.9.
- Post-test means ranged from 40.0 to 95.7.
- Of 28 comparisons made, 20 were statistically significant.
- There were two cases in which students performed better on the pre-test (Forest Hills - 12th grade, South Shore - 10th grade), but the differences were not statistically significant.
- The educational significance of the results are as follows:

  three cases of small educational significance (less than .20)

  five cases of medium educational significance (.20-.50)

  six cases of large educational significance (.51-.80)

  fourteen cases of very large educational significance (greater than .80)

- The data for United Lubavitcher Yeshivot indicated that all students had exactly the same score, both on the pre-test and on the post-test. In addition, correlations of pre- and post-test scores again indicate problems of test administration or of data reporting for Forest Hills, South Shore, and Beth Rivkah students.

Table 23. Mathematics course offerings.

MATHEMATICS	NON-PUBLIC SCHOOL	LINCOLN HIGH SCHOOL	FOREST HILLS HIGH SCHOOL	SOUTH SHORE HIGH SCHOOL
General Math I		X	X	X
General Math II		X	X	X
General Math III		X	X	
Fundamental Math I		X	X	
BCT Math			X	
Business Math/Bookkeeping		X	X	
Algebra I, Academic	X	X	X	X
Algebra II, Academic	X	X	X	X
Algebra III, Academic	X	X	X	X
Intermediate Algebra I		X	X	
Intermediate Algebra II		X	X	
Transitional Math, Academic			X	X
Geometry I		X	X	
Geometry II	X	X	X	X
Geometry III			X	X
Advanced Algebra and Trigonometry		X	X	X
Calculus		X	X	X

. The public schools had a wider variety of course offerings ranging from General Math I to Calculus.

Table 24. Number of students attending courses and percent passing teacher-made examinations in mathematics.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	6	100%	9	100%	50	100%
LINCOLN HIGH SCHOOL	7	71%	38	66%	50	82%	27	96%	122	79%
FOREST HILLS HIGH SCHOOL	36	64%	32	81%	46	89%	16	100%	130	84%
SOUTH SHORE HIGH SCHOOL			13	46%	15	53%	27	74%	55	62%
TOTAL	68	78%	93	72%	117	82%	79	89%	357	81%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	27	100%	10	100%	6	100%	9	100%	52	100%
LINCOLN HIGH SCHOOL	12	83%	29	93%	39	100%	16	100%	96	96%
FOREST HILLS HIGH SCHOOL	37	73%	42	83%	44	82%	17	100%	140	82%
SOUTH SHORE HIGH SCHOOL			13	100%	16	100%	14	100%	43	100%
TOTAL	76	84%	94	90%	105	92%	56	100%	331	91%

- The non-public schools had a 100 percent passing rate in both fall and spring semesters.
- The overall passing rate for all schools improved from 81 percent in the fall to 91 percent in the spring.
- South Shore had the lowest passing rate (62 percent) in the fall, but improved remarkably with 100 percent passing in the spring.
- In both semesters there were regular improvements in passing rates with grade level. Ninth or tenth graders had the lowest rates while twelfth graders had the highest rates.

Table 25. Science course offerings.

SCIENCE	NON-PUBLIC SCHOOL	LINCOLN HIGH SCHOOL	FOREST HILLS HIGH SCHOOL	SOUTH SHORE HIGH SCHOOL
Biology I, Academic	X	X	X	X
Biology I, General		X	X	
Biology II, Academic		X	X	X
Biology II, General			X	
General Science I	X	X	X	X
General Science II, Academic	X	X	X	X
General Science II, General			X	X
Biochemistry			X	
Chemistry	X	X	X	X
Earth Science/Geology		X	X	
Physics		X	X	X
Horticulture			X	
Health Careers			X	
Nursing			X	

- Forest Hills High School had the greatest variety of course offerings, followed by Lincoln High School and South Shore High School.
- The non-public schools offered the smallest variety of courses.

Table 26. Number of students attending courses and percent passing teacher-made examinations in science.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	7	100%	9	100%	51	100%
LINCOLN HIGH SCHOOL	6	67%	17	71%	18	89%	21	95%	62	84%
FOREST HILLS HIGH SCHOOL	35	66%	32	75%	48	83%	23	100%	138	82%
SOUTH SHORE HIGH SCHOOL			8	12%	7	57%	13	61%	28	46%
TOTAL	66	79%	67	70%	80	84%	66	91%	279	82%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	27	100%	10	100%	7	100%	9	100%	53	100%
LINCOLN HIGH SCHOOL	4	100%	12	92%	19	100%	12	92%	47	96%
FOREST HILLS HIGH SCHOOL	36	78%	41	81%	43	98%	19	95%	139	87%
SOUTH SHORE HIGH SCHOOL			9	100%	18	100%	21	100%	48	100%
TOTAL	67	88%	72	88%	87	99%	61	97%	287	93%

- The non-public schools had a 100 percent passing rate in both the fall and spring semesters.
- The overall passing rate for all schools improved from 82 percent in the fall to 93 percent in the spring.
- South Shore had the lowest passing rate (46 percent) in the fall, but had 100 percent passing in the spring.
- Eleventh and twelfth graders had higher success rates than ninth and tenth graders in both fall and spring.

Table 27. Social studies course offerings.

SOCIAL STUDIES	NON-PUBLIC SCHOOLS	LINCOLN HIGH SCHOOL	FOREST HILLS HIGH SCHOOL	SOUTH SHORE HIGH SCHOOL
American History I, Academic	X	X	X	
American History I, General		X	X	X
World History I, Academic	X	X	X	
World History I, General		X		X
World History II, Academic	X			
World History II, General		X		
Eastern Civilization	X		X	
Western Civilization		X	X	
Economics, Academic		X	X	X
Economics, General		X	X	
Consumer Economics			X	
American Studies I			X	X

- Lincoln High School and Forest Hills High School had a slightly greater variety of course offerings than South Shore High School or the non-public schools.

Table 28. Number of students attending courses and percent passing teacher-made examinations in social studies.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	96%	10	100%	7	100%	9	100%	51	98%
LINCOLN HIGH SCHOOL	7	86%	38	85%	49	94%	23	96%	117	91%
FOREST HILLS HIGH SCHOOL	35	83%	35	86%	49	96%	29	83%	148	88%
SOUTH SHORE HIGH SCHOOL			12	8%	16	81%	26	96%	54	72%
TOTAL	67	88%	95	77%	121	93%	87	92%	370	88%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	26	100%	10	100%	7	100%	9	100%	52	100%
LINCOLN HIGH SCHOOL	11	91%	34	100%	43	98%	18	100%	106	98%
FOREST HILLS HIGH SCHOOL	36	92%	42	84%	48	96%	26	100%	152	92%
SOUTH SHORE HIGH SCHOOL			12	92%	21	100%	25	100%	58	98%
TOTAL	73	95%	98	94%	119	97%	78	100%	368	96%

- The overall passing rate for all schools were very high and improved from 88 percent in the fall to 96 percent in the spring.
- As in math and science courses, the greatest improvement took place at South Shore High School where students went from 72 percent passing the fall to 98 percent passing in the spring.

Table 29. Native language course offerings.

NATIVE LANGUAGE STUDIES	NON-PUBLIC SCHOOLS	LINCOLN HIGH SCHOOL	FOREST HILLS HIGH SCHOOL	SOUTH SHORE HIGH SCHOOL
Native Language, Level II, Academic		X	X	
Native Language, Level III, Academic		X	X	
Native Language, Level IV, Academic		X		
Native Language, Advanced Placement		X		X
Native Language, Literature and Culture	X		X	

- The course offerings reported on the student data sheet varied considerably from site to site.
- Lincoln High School had the greatest variety of courses with differentiation of levels for students.
- South Shore offered only an advanced placement course; the non-public schools offered native language, literature and culture.

Table 30. Number of students attending courses and percent passing teacher-made examinations in native language arts.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	7	100%	9	100%	51	100%
LINCOLN HIGH SCHOOL	3	68%	29	52%	32	81%	7	86%	71	69%
FOREST HILLS HIGH SCHOOL										
SOUTH SHORE HIGH SCHOOL			11	54%	12	100%	18	100%	41	88%
TOTAL	28	96%	50	64%	51	88%	34	97%	163	83%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	7	100%	9	100%	51	100%
LINCOLN HIGH SCHOOL	8	87%	28	89%	30	90%	4	100%	70	90%
FOREST HILLS HIGH SCHOOL										
SOUTH SHORE HIGH SCHOOL			16	100%	14	100%	11	100%	41	100%
TOTAL	33	97%	54	94%	51	94%	24	100%	162	96%

- The non-public schools had 100 percent passing rates in both semesters.
- The overall passing rate for all schools improved from 83 percent in the fall to 96 percent in the spring.
- Lincoln High School students improved from 69 percent passing in the fall to 90 percent passing in the spring.
- South Shore High School students improved from 88 percent passing in the fall to 100 percent passing in the spring.

Table 31. Miscellaneous course offerings.

	NON-PUBLIC SCHOOLS	LINCOLN HIGH SCHOOL	FOREST HILLS HIGH SCHOOL	SOUTH SHORE HIGH SCHOOL
CULTURAL HERITAGE				
Native Culture	X	X	X	X
ATTITUDE				
Attitude Towards School	X		X	X
Attitude Towards American Culture		X		
BUSINESS EDUCATION				
Typing	X	X	X	X
Stenography		X	X	
Accounting		X	X	X
Business Skills	X	X	X	
Commercial Arithmetic		X		
Commercial Record Keeping		X	X	
VOCATIONAL EDUCATION				
Auto Mechanics		X		X
Computer Programming		X	X	X
PRACTICAL ARTS/ALL OTHER AREAS				
Photography and Language Arts				X
Music and Language Arts		X	X	
Fine Arts and Language Arts			X	

- All schools evaluated knowledge of cultural heritage.
- Lincoln High School evaluted attitudes towards American culture while the other schools evaluated attitudes towards school.
- All schools had typing and at least one other business education course, with Lincoln High School and Forest Hills High School providing the greatest variety.
- Auto mechanics was offered at Lincoln High School and South Shore High School and computer programming was offered at all the public schools.
- The public school all offered courses in fine arts with language arts.

Table 32. Number of students attending courses and percent passing teacher-made examinations in cultural heritage.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	7	100%	9	100%	51	100%
LINCOLN HIGH SCHOOL	3	100%	29	100%	32	100%	7	100%	71	100%
FOREST HILLS HIGH SCHOOL	2	100%							2	100%
SOUTH SHORE HIGH SCHOOL			11	64%	12	100%	18	94%	41	88%
TOTAL	30	100%	50	92%	51	100%	34	97%	165	97%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	7	100%	9	100%	51	100%
LINCOLN HIGH SCHOOL	8	100%	28	100%	30	100%	4	100%	70	100%
FOREST HILLS HIGH SCHOOL	22	95%	10	100%	6	100%	4	75%	42	95%
SOUTH SHORE HIGH SCHOOL			5	100%	12	100%	9	100%	26	100%
TOTAL	55	98%	53	100%	55	100%	26	96%	189	99%

. Passing rates in cultural heritage improved from 97 percent in the fall to 99 percent in the spring.

Table 33. Number of students attending courses and percent pasing teacher-made examinations in attitude.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	25	100%	10	100%	7	100%	8	100%	50	100%
LINCOLN HIGH SCHOOL	7	100%	39	100%	51	100%	30	100%	127	100%
FOREST HILLS HIGH SCHOOL	35	100%	39	100%	49	100%	29	100%	152	100%
SOUTH SHORE HIGH SCHOOL			21	71%	26	100%	34	100%	81	92%
TOTAL	67	100%	109	94%	133	100%	101	100%	410	98%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	27	100%	10	100%	7	100%	8	100%	52	100%
LINCOLN HIGH SCHOOL	12	100%	36	100%	44	100%	22	100%	114	100%
FOREST HILLS HIGH SCHOOL	35	100%	41	100%	48	100%	29	100%	153	100%
SOUTH SHORE HIGH SCHOOL			22	82%	27	100%	33	100%	82	95%
TOTAL	74	100%	109	96%	126	100%	92	100%	401	99%

. Students' overall passing rates on tests concerning attitudes toward school and American culture were 98 percent in the fall and 99 percent in the spring.

Table 34. Number of students attending courses and percent passing teacher-made examinations in business education.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	26	100%	10	100%	7	100%	9	100%	52	100%
LINCOLN HIGH SCHOOL			3	100%	3	100%	1	100%	7	100%
FOREST HILLS HIGH SCHOOL	3	100%	12	92%	26	96%	18	89%	59	93%
SOUTH SHORE HIGH SCHOOL					1	100%			1	100%
TOTAL	29	100%	25	96%	37	97%	28	93%	119	97%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS	26	100%	10	100%	7	100%	9	100%	52	100%
LINCOLN HIGH SCHOOL			1	100%	3	100%	4	100%	8	100%
FOREST HILLS HIGH SCHOOL	7	57%	12	92%	26	92%	16	94%	61	89%
SOUTH SHORE HIGH SCHOOL					2	100%	2	100%	4	100%
TOTAL	33	91%	23	96%	38	95%	31	97%	125	95%

- The overall passing rates for business education courses were 97 percent in the spring.
- At Forest Hills, students' success rates went from 93 percent in the fall to 89 percent in the spring.
- All other schools had 100 percent passing rates in both fall and spring.

Table 35. Number of students attending courses and percent passing teacher-made examinations in vocational education.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS										
LINCOLN HIGH SCHOOL							2	100%	2	100%
FOREST HILLS HIGH SCHOOL	1	100%			2	100%			3	100%
SOUTH SHORE HIGH SCHOOL					2	100%	1	100%	3	100%
TOTAL	1	100%			4	100%	3	100%	8	100%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS										
LINCOLN HIGH SCHOOL			1	100%	1	100%			2	100%
FOREST HILLS HIGH SCHOOL	1	100%			1	100%	1	100%	3	100%
SOUTH SHORE HIGH SCHOOL					3	100%	4	100%	7	100%
TOTAL	1	100%	1	100%	5	100%	5	100%	12	100%

. The passing rate for vocational education courses was 100 percent both semesters at all schools.

Table 36. Number of students attending courses and percent passing teacher-made examinations in courses combining fine arts and language arts.

FALL 1980	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS										
LINCOLN HIGH SCHOOL	6	83%	22	82%	33	100%	18	94%	79	92%
FOREST HILLS HIGH SCHOOL	2	100%	11	100%	17	81%	13	100%	43	92%
SOUTH SHORE HIGH SCHOOL					1	100%			1	100%
TOTAL	8	87%	33	88%	51	93%	31	97%	123	92%

SPRING 1981	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING	N	PERCENT PASSING
NON-PUBLIC SCHOOLS										
LINCOLN HIGH SCHOOL	7	86%	17	94%	15	100%	10	100%	49	96%
FOREST HILLS HIGH SCHOOL	13	92%	21	100%	17	97%	14	100%	65	98%
SOUTH SHORE HIGH SCHOOL							3	100%	3	100%
TOTAL	20	90%	38	97%	32	98%	27	100%	117	97%

- The passing rate in these courses improved from 92 percent in the fall to 97 percent in the spring.
- Students in the upper grade levels passed more often than those at lower levels in both semesters.

Table 37. Significance of the difference between attendance percentages of program students at South Shore High School and the attendance percentage of the school.

Average school-wide attendance percentage: 77.93

GRADE	N	MEAN PERCENTAGE	STANDARD DEVIATION	PERCENTAGE DIFFERENCE	t	p
10	20	83.90	10.52	5.97	2.54	.025
11	22	92.86	6.90	14.93	10.15	.001
12	32	91.09	8.54	13.16	8.72	.001
TOTAL	74	89.68	9.30	11.75	10.87	.001

- Program participants had an average attendance of 89.68 percent which is 11.75 percentage points better than the school-wide attendance rate.
- Attendance rates for program participants were better than the school-wide attendance at all grade levels, with differences ranging from 5.97 percentage points to 14.93 percentage points.
- All differences were statistically significant.

Table 38. Significance of the difference between attendance percentages of program students at Forest Hills High School and the attendance percentage of the school.

Average school-wide attendance percentage: 84.90

GRADE	N	MEAN PERCENTAGE	STANDARD DEVIATION	PERCENTAGE DIFFERENCE	t	p
9	33	93.09	6.23	8.19	7.55	.001
10	35	91.97	7.53	7.07	5.55	.001
11	50	92.14	7.29	7.24	7.02	.001
12	29	90.28	4.59	5.38	6.31	.001
TOTAL	147	91.95	6.67	7.05	12.82	.001

- Program participants had an average attendance of 91.95 which is 7.05 percentage points better than the school-wide attendance rate.
- Attendance rates for program participants were better than the school-wide attendance at all grade levels, with differences ranging from 5.38 to 8.19 percentage points.
- All differences were statistically significant.

Table 39. Significance of the difference between attendance percentages of program students at Abraham Lincoln High School and the attendance percentage of the school.

Average school-wide attendance percentage: 77.77

GRADE	N	MEAN PERCENTAGE	STANDARD DEVIATION	PERCENTAGE DIFFERENCE	t	p
9	9	92.00	5.24	14.23	8.15	.001
10	34	89.68	5.34	11.91	13.00	.001
11	45	90.29	5.70	12.52	14.73	.001
12	22	89.91	4.08	12.14	13.96	.001
TOTAL	110	90.16	5.23	12.39	24.85	.001

- Program participants had an average attendance of 90.16 percent which is 12.39 percentage points better than the school-wide attendance.
- Attendance rates for program participants were better than the school-wide attendance at all grade levels, with differences ranging from 11.91 to 14.23 percentage points.
- All differences were statistically significant.

Table 40. Attendance rates for non-public schools.

SOLOMON SCHECHTER		
GRADE	N	MEAN
9	12	91.2
10	9	91.2
11	7	93.6
12	5	92.8
TOTAL	33	92.0

YESHIVA OF FLATBUSH		
GRADE	N	MEAN
9	2	98.0
10	1	100.0
11	6	95.0
12	7	88.7
TOTAL	16	92.9

BETH RIVKAH HIGH SCHOOL		
GRADE	N	MEAN
9	2	97.0
10	4	92.3
11	2	94.5
12	4	94.5
TOTAL	12	94.2

FOREST HILLS MESIFTA		
GRADE	N	MEAN
No data reported		

UNITED LUBAVITCHER YESHIVOT		
GRADE	N	MEAN
TOTAL	5	88.0
SD = 0		

YESHIVOT HARAMAH		
GRADE	N	MEAN
9	13	89.2
10	5	87.8
11	9	87.3
12	6	87.5
TOTAL	33	88.2

EZRA ACADEMY OF QUEENS		
GRADE	N	MEAN
9	13	93.6
10	3	97.0
11	2	94.5
12	2	89.5
TOTAL	20	93.8

BE'ER HAGOLAH HIGH SCHOOL		
GRADE	N	MEAN
9	26	92.1
10	10	93.1
11	7	92.2
12	9	92.6
TOTAL	52	92.5

- Average school attendance for program participants in the non-public schools ranged from 88.2 percent at Yeshivot Haramah to 94.2 percent at Beth Rivkah High School.
- Data were unavailable for Forest Hills Mesifta.
- United Lubavitcher Yeshivot reported that its five pupils all had the same attendance rate, an unusual result.

VII. CONCLUSIONS AND RECOMMENDATIONS

It appears that the multi-site format is perhaps the most rational and efficient way to organize a program such as this one. The potential target population is very small (not so small that it can be ignored, but not as large as some other minorities in New York City); it is scattered over a sizeable area, but not diffused -- in places, its concentration is quite high. It is definitely a minority here, with a culture sufficiently different to require acculturation before integration, but not completely alien to the local ethos; lastly, it has a host medium here, a deeply rooted, functioning network of healthy communities organized and desirous to help.

Thus, the population is too large and too diffuse to be served efficiently by one or two sites. It is too small to be broken down into a number of separate programs, as this would cause unnecessary duplication and lack of coordination which is, perhaps, one of the major advantages of a multi-site program. The population is also too small to cause the program to become unwieldy and unmanageable due to its size. What is needed is sufficient centralization to ensure coordination and prevent waste of resources, while at the same time keeping things sufficiently loose in order to allow local community initiative to operate freely without, however, letting things fall apart. The only satisfactory format that would answer these requirements is a multi-site program.

The program, indeed, effectively serves as a sort of a "Triboro Bridge," binding the pupil to the school -- both being initially strangers to each other -- by means of a familiar, friendly island where people share the

same values and speak the same language. In this regard, the program is to be complimented on its selection of all personnel, but especially those comprising the "local site teams," who are temperamentally well suited for the responsible and sensitive work they are doing. If a personal note may be permitted, while observing and evaluating the program, the evaluator frequently compared his own rather traumatic entry into the New York City school system as an immigrant youngster some thirty-five years ago, and could not express in words how he and others in similar circumstances frequently longed for someone to understand, someone to listen, someone to explain -- but there had been no one.

In the second year of its existence, the program is continuing its pioneering work, blazing a trail into uncharted lands. It has admirably overcome its "shakedown cruise" during the first year; now it has acquired a stable organizational structure, balance in the interrelationship of its components, and confidence in its ability to do what it had set out to. It has successfully resisted the "temptation by bureaucracy" and continued to be a feeling, humane, compassionate, and understanding organization despite its attainment of a high degree of operational and institutional efficiency.

It is recommended, however, that the program should be allowed to extend its services to that part of the target population which still remains unserved. Services to Russian students should be extended, first, vertically downwards, to include the junior high schools and the intermediate school populations, perhaps even extending as far down as kindergarten, while remaining geographically in the same general area as it is now.

While intermediate and elementary school students fall under the jurisdiction of their respective districts, the central project could work

with districts to facilitate the development of programs in the districts; articulate with community agencies; help train staff; and develop and disseminate curricula and materials.

It would also be desirable to extend the territory served by the program into the boroughs of Queens and Manhattan. To avoid overextension of resources, the "magnet school" concept could be utilized in both instances, whether expanding vertically or horizontally. Additionally a "mobile demonstration team" could travel from school to school to encourage each district and the local community to exercise local initiative and to set up a permanent program site in their vicinity.

It would be, indeed, a shame and waste of effort and resources if all the accumulated experience and work that has been associated with the New York City Russian Bilingual Progam would remain restricted to its relatively small territory and the rather small group of people that it has been allowed to serve. Perhaps it would be beneficial as well to establish explorative contact with the public education establishments in other large metropolitan areas where immigrants from the Soviet Union have been settling -- such as Washington, D.C., Boston, or San Francisco.